

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 02-237220

(43)Date of publication of application : 19.09.1990

(51)Int.Cl.

H03K 19/08

H03K 17/16

H03K 17/56

// H01L 27/06

(21)Application number : 01-056942

(71)Applicant : FUJITSU LTD

(22)Date of filing : 09.03.1989

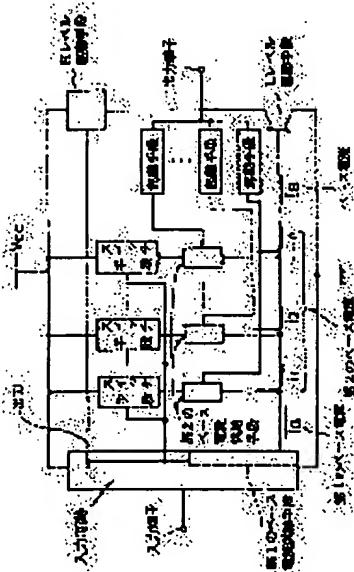
(72)Inventor : HIROCHI KATSUJI

(54) OUTPUT CIRCUIT

(57)Abstract:

PURPOSE: To set the fall change of an output signal to be gradual and to evade the ringing of the waveform of an output fall by increasing a base current supplied to an L level driving means stepwise.

CONSTITUTION: When the output of an input circuit changes from a first potential state to a second potential state, a first base current i_a is firstly generated, the L level driving means is operated by the first base current i_a and the potential of an output terminal is changed from an H level to an L level. When the potential of the output terminal reaches a prescribed potential, second base currents i_{1-in} are generated and they are added to the first base current i_a . Since the base current i_B is added with the lapse of time so as to increase them stepwise, the fall change of the output signal comes to gradual and the occurrence of the ringing of the output fall waveform can be evaded.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of

[rejection]

[Kind of final disposal of application other than
the examiner's decision of rejection or
application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's
decision of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

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PATENT FAMILY SEARCH FOR JP 02-237220

Subaccount 13361-049JP1

SOURCES:**Selected file: PLUSPAT**

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Selected file: WPAT

Derwent World Patents Index, (c) Thomson Scientific
 UP (basic), UE(equiv), UA (poly), UB (chem) : updates through 2006-12
 Manual Code Revision 2006 - final lists available on Thomson Scientific
 Website. Revised codes will be implemented in the first update of 2006.
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 Coverage: 75 patent offices ; start dates vary from 1968 forward
 Current through weekly update 2006-07/up ; last update 2006/02/17
 IPC Classes: for searching prior to 2006, use the qualifier: /IC
 For searching IPC v8 (pd>=2006), use the qualifiers: /ICAA /ICCA

Selected file: USPAT

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 Coverage : 1971 to present (2006-08/UP)
 Last database update : 2006/02/21 (YYYY/MM/DD)
 For complete file information : see INFO USPAT
 NEW 09/09/03 Kind Code for US Design patents from D to S1

Selected file: USAPPS

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 Coverage: from beginning of Pre-Grant publication in March 2001
 Reloaded: FactSheet on web. Pricing, see: INFO USAPPS
 Last database update: 2006/02/23 (YYYY/MM/DD) 2006-08/UP

Selected file: IFIPAT

IFIPAT Claims/US Patents (c) IFI /CLAIMS(R) Patent Services
 Thru PGP pd=2006-02-16 (2006-07/uap) ; Grant PD=2006-02-21 (2006-08/up)
 Std Biblio thru PGP PD=2001-11(2002-11/uam) ;Grant PD=2005-06(2006-02/UM)
 Chem Indxg thru PGP PD=2004-06(2006-02/uab) ;Grant PD=2005-10(2006-02/UB)
 Reloaded 01/15/04 with Updated US Classes, & Business Terms(/BT)
 From 06/04 forward questionable source data received from USPTO shows
 PCT filing date, not date of national stage as app date for US patents
 that entered via PCT route. IFI is investigating.

PATOLIS-e

PATENT FAMILY

#	Patent No.	Kind	Date	Applic.No.	Date
1)	JP02237220	A	19900919	1989JP-0056942	19890309

Priority :
1989JP-0056942 19890309

SEARCH RESULTS:

1 / 1 *PLUSPAT - ©QUESTEL-ORBIT - image*
Patent Number :
JP2237220 A 19900919 [JP02237220]
Publication Stage :
(A) Doc. Laid open to publ. Inspec.
Title :
(A) OUTPUT CIRCUIT
Patent Assignee :
(A) FUJITSU LTD
Patent Assignee :
(A) FUJITSU LTD
Inventor(s) :
(A) HIROCHI KATSUJI
Intl Patent Class :
(A) H01L-027/06 H03K-017/16 H03K-017/56 H03K-019/08
Application Nbr :
JP5694289 19890309 [1989JP-0056942]
Priority Details :
JP5694289 19890309 [1989JP-0056942]

JAPANESE LEGAL STATUS INFORMATION FROM PATOLIS-e

** Result [P] ** Format(P803) 2006.02.24 1/ 1

Application No./Date: 1989- 56942[1989/ 3/ 9]
 Public Disclosure No./Date: 1990-237220 [1990/ 9/19]
 Registration No./Date: []
 Examined Publication Date (present law): []
 Examined Publication No./Date (old law): []
 PCT Application No.:
 PCT Publication No./Date:
 Preliminary Examination: ()
 Priority Country/Date/No.: () [] ()
 Domestic Priority: [] ()
 Date of Request for Examination: []
 Accelerated Examination: ()
 Kind of Application: (0000)
 Critical Date of Publication: [1989/ 3/ 9]()
 No. of Claims: (2)
 Applicant: FUJITSU LTD
 Inventor: HIROCHI KATSUJI
 IPC: H03K 19/08 H03K 17/16 H03K 17/56
 =H01L 27/06
 FI: H01L 27/06 ,321G H03K 17/16 H H03K 17/56 E
 H03K 19/08 A
 F-Term: SF048AB07,AC05,AC10,5J055AA15,BB01,CC11,DD06,EE12,EE26,GG01,GG02,GG04,
 5J056AA04,BB24,CC00,CC22,DD02,DD13,DD35,DD40,DD57,FF08,KK01,SJ055AX25,AX55,A
 X56,AX64,BX16,DX04,DX56,DX79,EX07,EX11,EX21,EY13,EY21,FX05,FX13,GX01,GX02,GX
 05
 Expanded Classification: 424,422
 Fixed Keyword: R097
 Citation: [, . . ,] (, ,)
 Title of Invention: OUTPUT CIRCUIT

Abstract: PURPOSE: To set the fall change of an output signal to be gradual and to evade the ringing of the waveform of an output fall by increasing a base current supplied to an L level driving means stepwise. CONSTITUTION: When the output of an input circuit changes from a first potential state to a second potential state, a first base current i_a is firstly generated, the L level driving means is operated by the first base current i_a and the potential of an output terminal is changed from an H level to an L level. When the potential of the output terminal reaches a prescribed potential, second base currents i_{1-in} are generated and they are added to the first base current i_a . Since the base current i_B is added with the lapse of time so as to increase them stepwise, the fall change of the output signal comes to gradual and the occurrence of the ringing of the output fall waveform can be evaded.COPYRIGHT: (C)1990,JPO&Japio

Relation to Original Application: ()
 Original Application No.: ()
 Original Registration No.: ()
 Retroactive Date: []
 Assignment/License: ()
 Classification of Examiners Decision/Date:
 () []
 Final Examinational Transaction/Date:
 (withdrawal by no request for examination) [1996/ 6/25]
 Kind of Examination: (01)
 Examination Intermediate Record:
(A63 1989/ 3/10,PATENT APPLICATIONUTILITY MODEL REGISTRATION APPLICATION, 1
4000:) (A23 1989/ 3/31,NOTICE OF APPLICATION NUMBER, :)
(A7D2 1992/ 9/28,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
:)
(A7D2 1993/ 8/20,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
:)
(A7D2 1995/ 4/ 5,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
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(A7D2 1995/ 5/ 9,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
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(A7D2 1996/ 2/13,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
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(A7D2 1996/ 2/13,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
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(A7D1 1996/ 3/26,NOTIFICATION OF LUMP CHANGE IN DOMICILE (APPLICANT),
:)
(A7D2 1996/ 3/26,NOTIFICATION OF LUMP CHANGE IN DOMICILE (REPRESENTATIVE),
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(A300 1996/ 6/13,MAKING OF FILE WRAPPER EXTRACTION LIST OF UNREQUEST FOR EXA
MINATION, :)

*** Trial No./Date: [] ***
Kind of Trial: [] ***
Defendant: -
Defendant: -
Opponent: -
No. of Opposition in Effect: ()
No. of Opposition Claims: ()()
Classification of Trial Decision of Opposition/Date:
() []
Final Disposition of Trial or Appeal/Date:
() []
Trial and Opposition Intermediate Record:

Registration Intermediate Record:

Amount of Annuity Payment: ()
Extinction of Right/Lapse Date of Right:
()[]
Closed Register Filing Date: []
Proprietor: -
Status of Register: ()